



**57<sup>TH</sup> ASMS CONFERENCE ON MASS SPECTROMETRY**  
**MAY 31 – JUNE 4, 2009 • SHORT COURSES: MAY 30 – 31, 2009**  
**Pennsylvania Convention Center, Philadelphia, Pennsylvania**

**LOCATION.** The conference and short courses will be held at the Pennsylvania Convention Center, 1101 Arch Street, Philadelphia, PA 19107. All oral sessions, poster sessions, and exhibit booths will be located in the convention center. Corporate Member hospitality suites will be in the Marriott Hotel which is connected to the convention center.

**REGISTRATION.** Conference on-site registration will open 2:00 pm, Saturday, May 30 in the convention center. There is no on-site registration for short courses.

**For more information:** [www.asms.org](http://www.asms.org)

American Society for Mass Spectrometry

2019 Galisteo Street, Building I-1, Santa Fe, NM 87505

Phone: (505) 989-4517 Fax: (505) 989-1073 [office@asms.org](mailto:office@asms.org) [www.asms.org](http://www.asms.org)



**Vice President for Programs: Scott A. McLuckey**

**TABLE OF CONTENTS**

Program Overview .....	S2
Workshops .....	S4
Sunday Program.....	S7
Monday Morning Oral Sessions .....	S7
Monday Afternoon Oral Sessions .....	S9
Tuesday Morning Oral Sessions .....	S12
Tuesday Afternoon Oral Sessions.....	S14
Wednesday Morning Oral Sessions .....	S16
Wednesday Afternoon Oral Sessions.....	S19
Thursday Morning Oral Sessions.....	S21
Thursday Afternoon Oral Sessions .....	S23
Monday Posters.....	S26
Tuesday Posters .....	S56
Wednesday Posters .....	S86
Thursday Posters.....	S118
Author Index .....	S150
Corporate Members .....	S216